UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/728,667	12/01/2000	Andrew Heller	5602-00800	5558

7590 08/19/2004

Jeffrey C. Hood
Meyertons, Hood, Kivlin, Kowert & Goetzel PC
P.O. Box 398
Austin, TX 78767-0398

EXAMINER	
NGUYEN, MIKE	
ART UNIT	PAPER NUMBER
2182	

DATE MAILED: 08/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/728,667	HELLER ET AL.	
	Examiner	Art Unit	
	Mike Nguyen	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 May 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6/3/04 and 6/7/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Notices & Remarks

1. Applicant's amendment 05/27/2004 in response to Examiner's Office Action has been reviewed but they are not deemed to be persuasive.

2. Claims 1-55 are pending for the examination.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 15, 29, 31, 41, 51 and 55 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification is silent regarding "wherein the non-volatile memory on the frame is dedicated to a plurality of files used by a user of the specific human interface for which the computer card is dedicated" and "wherein components on the computer card are arranged on the computer card with higher heat generating components near a front of the computer card".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-8, 10, 12-22, 24, 26-33, 36-38, 40-43, 46-48, and 50-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Pocrass (U.S. Pat. No. 5,428,806).

As to claim 1, Pocrass teaches a computing system (see fig. 1), comprising:

a computer card (see fig. 1 element 8), wherein the computer card comprises:

a frame (see fig. 1 element 8 and col. 5 lines 48-50);

a printed circuit board mounted to the frame (see fig 1 element 16 col. 5 lines 48-50);

a CPU comprised in the printed circuit board (see fig. 13 element 232 col. 15 lines 31-35);

a memory comprised on the printed circuit board (see fig. 13 element 240 col. 5 lines 52-54);

a non-volatile memory comprised on the frame (see fig. 13 element 245);

human interface logic comprised on the printed circuit board which is operable to receive one or more human interface signals and encoded the one or more human interface signals into a format suitable for transmission to a remote location (see fig. 12 and col. 17 line 49 to col. 18 line 34); and

a human interface connector coupled to human interface logic, wherein the human interface connector is configured to couple to one or more cables for transmission of the encoded one or more human interface signals to the remote location (see fig. 12 col. 17 line 49 to col. 18 line 34).

As to claim 2, Pocrass teaches the computing system of claim 1, wherein the human interface logic is operable to encode the one or more human interface signals into a format

suitable for transmission of a distance greater than 20 feet to the remote location (see col. 8 lines 34-47 wherein a twisted pair telephone cable can be used to connect the computer card and the remote location so that the transmission of distance between the computer card and the remote location can be greater than 20 feet).

As to claim 3, Pocrass teaches the computing system of claim 1, wherein the human interface logic is operable to receive two or more human interface signals and encode the two or more human interface signals into a format suitable for transmission to the remote location (see fig. 12 col. 17 line 49 to col. 18 line 34).

As to claim 4, Pocrass teaches the computing system of claim 3, wherein the two or more human interface signals comprise two or more of a video signal, keyboard signal, and pointing device signal (see fig. 12 col. 17 line 49 to col. 18 line 34 and fig. 3).

As to claim 5, Pocrass teaches the computing system of claim 3, wherein the two or more human interface signals comprise three or more of a video signal, keyboard signal, pointing device signal, and audio signal (see fig. 12 col. 17 line 49 to col. 18 line 34 and figs 3, 5).

As to claim 6, Pocrass teaches the computing system of claim 1, further comprising keyboard logic comprised on the printed circuit board for interfacing to a keyboard (see fig. 12):

wherein the keyboard logic is coupled to human interface logic (see fig. 13 element 17 and fig. 3 element 56);

wherein the keyboard logic generated keyboard signals that are provided to the human interface logic, wherein the one or more human interface signals include the keyboard signals (see col. 17 lines 49-62);

wherein the human interface logic is operable to receive the keyboard signals (see col. 17 lines 49-53); and

wherein the human interface logic is operable to encode the keyboard signals into a format suitable for transmission to the remote location (see col. 17 line 53 to col. 18 line 3).

As to claim 7, Pocrass teaches the computing system of claim 1, further comprising pointing device logic comprised on the printed circuit board for interfacing to a pointing device (see fig. 12):

wherein the pointing device logic is coupled to human interface logic (see fig. 13 and fig. 3 element 66);

wherein the pointing device logic generated pointing device signals that are provided to the human interface logic, wherein the one or more human interface signals includes the keyboard signals (see col. 17 lines 49-62);

wherein the human interface logic is operable to receive the pointing device signals (see col. 17 line 49-53); and

wherein the human interface logic is operable to encode the pointing device signals into a format suitable for transmission to the remote location (see col. 17 line 53 to col. 18 line 3).

As to claim 8, Pocrass teaches the computing system of claim 1, further comprising:

keyboard logic comprised on the printed circuited board for interfacing to a keyboard (see fig. 12 element 296 and fig. 3 element 56); and;

pointing device logic comprised on the printed circuit board for interfacing to a pointing device (see fig. 12 element 296 and fig. 3 element 66);

wherein each of the keyboard logic and the pointing device logic is coupled to the human interface logic (see figs 12, 13 element 296);

wherein the keyboard logic generates keyboard signals that are provided to the human interface logic (see col. 17 lines 49-62);

wherein the pointing device logic generates pointing device signals that are provided to the human interface logic (see col. 17 lines 49-62); and

wherein the encoded one or more human interface signals include encode keyboard signals and encode pointing device signals (see col. 17 line 53 to col. 18 line 3).

As to claim 10, Pocrass teaches the computing system of claim 1, further comprising video logic comprised on the printed circuit board for interfacing to a video display device (see fig. 12 element 302 and fig. 3 element 60):

wherein the video logic is coupled to human interface logic (see fig. 13 and fig. 3 element 60);

wherein the video logic generated video signals that are provided to the human interface logic, wherein the one or more human interface signals include the video signals (see col. 18 lines 6-22);

wherein the human interface logic is operable to receive the video signals (see col. 18 lines 6-22); and

wherein the human interface logic is operable to encode the video signals into a format suitable for transmission to the remote location (see col. 18 lines 6-34).

As to claim 12, Pocrass teaches the computing system of claim 1, further comprising network interface logic comprised on the printed circuit board for interfacing to a network, wherein the network logic is operable to encode network signals into a format suitable for transmission to network (see figs 12-13 and col. 17 line 49 to col. 18 line 3 and fig. 3 element 65).

As to claim 13, Pocrass teaches the computing system of claim 1, further comprising a power supply comprised on the frame, wherein the power supply is operable to couple to an external power source and supply power to computing system (see fig. 13 element 276 col. 16 lines 53-61 and fig. 14 element 338).

As to claim 14, Pocrass teaches the computing system of claim 1, further comprising: a cage having a plurality of slots, wherein the computer card is configured to be inserted into a slot of the cage, wherein the cage includes a cage connector which is configured to couple to the human interface connector on the computer card, wherein the cage connector also includes an external second connector electrically coupled to the cage connector, wherein the external second connector is configured for coupling to the one or more cables for transmission of the

encode one or more human interface signals to the remote location (see fig. 1 and col. 5 line 29 to col. 6 line 62).

Claims 15-22, 24, and 26-28 are of similar scope as claims 1-8, 10, and 12-14 and are therefore rejected under same rationale.

As to claim 29, Pocrass teaches a computing system, comprising:

A computer card, wherein the computer card comprises:

a frame (see fig. 1 element 8 and col. 5 lines 48-50);

a printed circuit board mounted to the frame (see fig 1 element 16 col. 5 lines 48-50);

a CPU comprised in the printed circuit board (see fig. 13 element 232 col. 15 lines 31-35);

a memory comprised on the printed circuit board (see fig. 13 element 240 col. 5 lines 52-54);

a non-volatile memory comprised on the frame (see fig. 13 element 245);

human interface logic comprised on the printed circuit board which is operable to receive one or more of: 1) receiving one or more outgoing human interface signals and encoding the one or more human interface signals into a format suitable for transmission to a remote location (see fig. 12 and col. 17 line 49 to col. 18 line 34) or 2) receiving one or more incoming encoded human interface signals from the remote location and decoding the one or more incoming human interface signals to format suitable for transmission to logic on the computing system (see col. 17 lines 15-48);

a human interface connector coupled to human interface logic, wherein the human interface connector is configured to couple to one or more cables for communication of one or more of outgoing of incoming encoded human interface signals with the remote location (see fig. 12 col. 17 line 49 to col. 18 line 34); and

a power supply comprised on the frame, wherein the power supply is operable to couple to an external power source and supply power to the computing system (see fig. 13 element 276 col. 16 lines 53-61 and fig. 14 element 338).

As to claim 30, Pocrass teaches the computing system of claim 29, wherein the remote location is more than 20 feet from the computing system (see col. 8 lines 34-47 wherein a twisted pair telephone cable can be used to connect the computer card and the remote location so that the transmission of distance between the computer card and the remote location can be greater than 20 feet).

Claim 31 is of similar scope as claim 1 and is therefore rejected under same rationale. Pocrass also teaches a cage having a plurality of slots wherein each of slots is configured to receive a computer card (see fig. 1 and col. 5 lines 29-36); and a power supply comprised on the frame wherein the power supply is operable to couple to an external power source and supply power to the computing system (see fig. 13 element 276 col. 16 lines 53-61 and fig. 14 element 338).

As to claim 32, Pocrass teaches the system of claim 31, wherein each computer card further comprises network interface logic comprised on the printed circuit board for interfacing to a network (see figs 12-13 and col. 17 line 49 to col. 18 line 3 and fig. 3 element 65).

As to claim 33, Pocrass teaches the system of claim 32,

wherein each of the computer cards further includes one or more of video interface logic, keyboard interface logic, and pointing device logic for generating video signals, keyboard signals, and pointing device signals (see col. 17 lines 49-62 and col. 18 lines 6-22), respectively; and

wherein the one or more of the video interface logic, keyboard interface logic, and pointing device logic are each configured to couple to the human interface logic (see fig. 13 element 17 and fig. 3 element 56, 60, 66);

wherein the human interface is operable to receive one or more of the video signals, the keyboard signals, and pointing device signals, and encode the signals into a format suitable for transmission to the remote locations (see col. 17 line 53 to col. 18 line 3 and col. 18 lines 6-34); and

wherein the encoded one or more of the video signals, and the pointing device signals, are comprised in the encode human interface signals (see col. 17 line 49 to col. 18 line 34).

As to claim 36, Pocrass teaches the system of claim 31, wherein the cage further comprises a cage connector which is adapted to couple to the human interface connector on each of the computer cards, wherein the cage connector also includes an external second connector

adapted for coupling to the one or more cables for transmission of the encoded human interface signals to the remote location (see figures 4, 5 and column 8 lines 26-68 and column 9 lines 1-3).

As to claim 37, Pocrass teaches the system of claim 36, wherein the cage connector is further configured to couple to the network interface logic on each of the computer cards, wherein the external second connector is also configured for coupling to one or more network cables for coupling each of the computer cards to the network (see col. 17 line 49 to col. 18 line 3 and fig. 3 element 65).

As to claim 38, Pocrass teaches the system of claim 36, wherein each of the computer cards further includes one or more of video interface logic for generating video signals, keyboard interface logic for generating keyboard signals, and pointing device interface logic for generating pointing device signals (see col. 17 lines 49-62 and col. 18 lines 6-22); and wherein the cage connector is further configured to coupled to the one or more of the video interface logic, the keyboard interface logic, and the pointing device interface logic on each of the computer cards, wherein the external second connector is also adapted for coupling to the one or more cables for transmission of the one or more of the video signal, the keyboard signals, and the pointing device signals, to the remote location (see fig. 1 and col. 5 line 29 to col. 6 line 62).

As to claim 40, Pocrass teaches the system of claim 31, wherein the human interface logic is operable to encode the one or more human interface signals into a format suitable for transmission of a distance greater than 20 feet to the remote location (see col. 8 lines 34-47

wherein a twisted pair telephone cable can be used to connect the computer card and the remote location so that the transmission of distance between the computer card and the remote location can be greater than 20 feet).

Claims 41-50 are of similar scope as claims 31-40 and therefore rejected under same rationale.

As to claim 51, Pocrass teaches a system comprising a plurality of computing systems and corresponding human interfaces, the system comprising:

a cage having a plurality of slots, wherein each of the slots is configured to receive a computer card (see fig. 1 and col. 5 lines 29-36);

wherein each computer card comprises:

a frame (see fig. 1 element 8 and col. 5 lines 48-50);

a printed circuit board mounted to the frame (see fig 1 element 16 col. 5 lines 48-50);

a CPU comprised in the printed circuit board (see fig. 13 element 232 col. 15 lines 31-35);

a memory comprised on the printed circuit board (see fig. 13 element 240 col. 5 lines 52-54);

a non-volatile memory comprised on the frame (see fig. 13 element 245);

human interface logic comprised on the printed circuit board which is operable to receive one or more of: 1) receiving one or more outgoing human interface signals and encoding the one or more human interface signals into a format suitable for transmission to a remote location (see

fig. 12 and col. 17 line 49 to col. 18 line 34) or 2) receiving one or more incoming encoded human interface signals from the remote location and decoding the one or more incoming human interface signals to format suitable for transmission to logic on the computing system (see col. 17 lines 15-48);

a human interface connector coupled to human interface logic, wherein the human interface connector is configured to couple to one or more cables for communication of one or more of outgoing of incoming encoded human interface signals with the remote location (see fig. 12 col. 17 line 49 to col. 18 line 34); and

a power supply comprised on the frame, wherein the power supply is operable to couple to an external power source and supply power to the computing system (see fig. 13 element 276 col. 16 lines 53-61 and fig. 14 element 338);

a plurality of human interfaces each located at a location remote from the cage, wherein each of the human interfaces includes a display device and at least one user input device (see figs 12-13 and fig. 3 elements 60, 56, 66); and

at least one cable coupled between each computer card and a corresponding one of the human interfaces, wherein each at least on cable is operable to communication the one or more outgoing or incoming encoded human interface signals with the corresponding human interface (see col. 17 line 49 to col. 18 line 22).

As to claim 52, Pocrass teaches the system of claim 51, wherein the remote location is further than 20 feet from the cage (see col. 8 lines 34-47 wherein a twisted pair telephone cable

can be used to connect the computer card and the remote location so that the transmission of distance between the cage and the remote location can be greater than 20 feet).

As to claim 53, Pocrass teaches the system of claim 51, wherein the cage further comprises a cage connector which is configured to couple to the human interface connector on each of the computer cards, wherein the cage connector also includes an external second connector configured for coupling to each of the one or more cables for communication of the one or more encode outgoing or incoming human interface signals with the corresponding human interface (see fig. 1 and col. 5 line 29 to col. 6 line 62).

As to claim 54, Pocrass teaches the system of claim 51, wherein the each computer card further comprises network interface logic comprised on the printed circuit board for interfacing to a network (see figs 12-13 and col. 17 line 49 to col. 18 line 3 and fig. 3 element 65); and wherein the cage further comprises a cage connector which is adapted to couple to the network interface logic on each of the computer cards, wherein the cage connector also includes an external second connector adapted for coupling to one or more network cables for coupling each of the computer cards to the network (see col. 17 line 49 to col. 18 line 3).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 9 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pocrass and further in view of Fleming (U.S. Pat. No. 6,073,188).

As to claims 9 and 23, Pocrass fails to explicitly teach: USB logic is coupled to human interface logic; the USB logic generated USB signals that are provided to the human interface logic wherein the one or more human interface signals includes the USB signals; the human interface logic is operable to receive the USB signals; and the human interface logic is operable to encode the USB signals into a format suitable for transmission to the remote location. Fleming; however, teaches USB logic is coupled to human interface logic; the USB logic generated USB signals that are provided to the human interface logic wherein the one or more human interface signals includes the USB signals; the human interface logic is operable to receive the USB signals; and the human interface logic is operable to encode the USB signals into a format suitable for transmission to the remote location (see figure 1 element 122 and column 4 lines 19-42). Given the teaching of Fleming, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Pocrass by employing the well known or conventional feature of the computer system, such as taught by Fleming, in order to provide convenient for connecting the human interface to computer system.

9. Claims 11 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pocrass and further in view of Beasley et al. (U.S. Pat. No. 5,884,096).

As to claims 11, and 25, Pocrass fails to explicitly teach: audio logic is coupled to human interface logic; the audio logic generated audio signals that are provided to the human interface logic wherein the one or more human interface signals includes the audio signals; the human interface logic is operable to receive the video signals; and the human interface logic is operable

to encode the audio signals into a format suitable for transmission to the remote location. Beasley; however, teaches audio logic is coupled to human interface logic; the audio logic generated audio signals that are provided to the human interface logic wherein the one or more human interface signals includes the audio signals; the human interface logic is operable to receive the video signals; and the human interface logic is operable to encode the audio signals into a format suitable for transmission to the remote location (see figures 1, 2, 3 and column 3 lines 1-30). Given the teaching of Beasley, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Pocrass by employing the well known or conventional feature of the computer system, such as taught by Beasley, in order to allow a computer system to transmit audio signal to the remote location.

10. Claims 34, 39, 44, 49, 35 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pocrass and further in view of Fleming and Beasley et al.

Claims 34, 39, 44, and 49 are directed to the system implementing the computer system of claims 9, 23, 11, 25. Beasley and Fleming teaches the computer system as set forth in claims 9, 23, 11, 25; therefore they also teaches the system as set forth in claim 34, 39, 44 and 49.

As to claims 35 and 45, Although Pocrass shows substantial features (discussed in claims 33 and 43), it fails to explicitly teach USB interface logic and encoded USB signals, and audio interface logic and encoded audio signals. Fleming; however; teaches USB interface logic and encoded USB signals (see figure 1 element 122 and column 4 lines 19-42); and Beasley teaches audio interface logic and encoded audio signals (see figures 1, 2, 3).

Response to Arguments

11. Applicant argues Pocrass does not teach "wherein the non-volatile memory on the frame is dedicated to a plurality of files used by a user of the specific human interface for which the computer card is dedicated" and "wherein components on the computer card are arranged on the computer card with higher heat generating components near a front of the computer card"; however, these limitations are construed to be new matter (see 35 U.S.C. 112, first paragraph rejection above)

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Nguyen whose telephone number is 703 305-5040. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 703 308-3301. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Nguyen
Patent Examiner
Group Art Unit 2182
08/17/3004

JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100